

REMARKS

Applicant replies to the Office Action dated March 18, 2009, with a two month extension of time. Claims 1 - 9 were pending in the application. The Examiner rejects claims 1 - 9. Applicant cancels claim 9 without prejudice to filing one or more claims, having similar subject matter, in other applications. Support for the amendments may be found in the originally-filed specification, claims, and figures. No new matter has been introduced by these amendments. Reconsideration of this application is respectfully requested.

The Examiner objects to Figures 7-9 and requests that Figures 7-9 be labeled with "Prior Art", per MPEP 608.02(g). Applicant submits Replacement Sheets, as requested by the Examiner.

The Examiner next objects to the drawing figures under 37 CFR 1.83(a) for failing to show a "second motor 117". Applicants respectfully disagree with this objection. As set forth in the specification at, for example, paragraph 0074, "The structure can be made by omitting the second motor 117 . . ." As such, Applicant respectfully asserts that the second motor 117 is not "essential for a proper understanding of the disclosed invention," as asserted by the Examiner. Nonetheless, to expedite prosecution, Applicants amend Figure 1, as suggested by the Examiner.

The Examiner next objects to the drawing figures under 37 CFR 1.83(a) because the Examiner asserts that the drawings do not show "a face which is tilted by approximately 45 degrees", as stated in claim 4, line 2. Applicants respectfully disagree with this objection. Figure 2 clearly shows element 532 and clearly shows element 532 at an angle or tilted. As set forth in the specification at, for example, paragraph 0077, "The cam follower **506** contacts a cam face **532** included in the cylindrical cam **503**." Moreover, as set forth in the specification at, for example, paragraph 0082, "Specifically, the cam face **532** of the cylindrical cam **503** is tilted along the rotation axis of the cylindrical cam **503** by a predetermined angle (hereinafter, referred to as a "lead angle")." As such, Applicant respectfully asserts that a tilted cam face 532 is shown in the drawings.

The Examiner next objects to the drawing figures under 37 CFR 1.84(p)(4) because the Examiner asserts that the drawings are unclear regarding element 503. Applicant respectfully disagrees with this objection. Applicant asserts that the cylindrical cam 503, as a power transmission means, includes the ball screw 513 in claim 6. In the specification, the cylindrical cam 503 and ball screw 513 are shown as elements of the power transmission means. The ball

screw 113 is provided to move the table, while the ball screw 513 is provided on the scribing head 700 in order to move the holder holding member 504 up and down. Accordingly, the ball screw 113 is a different member from the ball screw 513 (which is provided at a different position to that of the ball screw 113), so ball screws 113 and 513 are clearly disclosed.

The Examiner next objects to the specification and requests that Figures 7-9 be labeled as “Prior Art”. Applicant amends the specification at paragraphs 0050-0052, as suggested by the Examiner.

The Examiner next rejects claim 6 under 35 USC 112 as being indefinite. Applicant respectfully disagrees with this rejection. As discussed above, Applicant asserts that the cylindrical cam 503, as a power transmission means, includes the ball screw 513 in claim 6. In the specification, the cylindrical cam 503 and ball screw 513 are shown as elements of the power transmission means. The ball screw 113 is provided to move the table, while the ball screw 513 is provided on the scribing head 700 in order to move the holder holding member 504 up and down. Accordingly, the ball screw 113 is a different member from the ball screw 513 (which is provided at a different position to that of the ball screw 113), so ball screws 113 and 513 are clearly disclosed and claim 6 is not indefinite.

The Examiner next rejects claims 8-9 under 35 USC 112 as being indefinite. Applicant respectfully disagrees with this rejection, but Applicant amends claim 8 to further clarify the patentable features and expedite prosecution. Applicant cancels claim 9, so the rejection for claim 9 is moot.

The Examiner next rejects claims 1-5 under 35 USC 102(b) as being anticipated by Piper, US Patent No. 6427357 (“Piper”). Applicant respectfully disagrees with these rejections, but Applicant amends the claims in order to clarify the patentable aspects of the claims and to expedite prosecution.

The device of the Piper is adapted to rotate the cam 22 and to press the anvil 44 of the stylus 20. As such, the stylus 20 is downwardly pressed intermittently to collide the point 42 of the stylus against the part 30 so as to form a mark having a shape of small shallow cone, as disclosed in Piper 4th column, lines 11-63.

In contrast, the claimed invention is adapted to an arrangement of the scribe head which is used to form a scribe line at the surface of the base plate, upon moving the scribe line forming means (such as the cutter wheel) along the surface of the base plate, and under the condition of

the scribe line forming means pressing onto the surface of the base plate. The arrangement being constituted to press the scribe line forming means onto a surface of the base plate by a constant pressing force applied thereto, even though there exists a concave and a convex shape on the surface of the base plate.

The claimed invention includes an arrangement which presses the base plate upon moving the scribe line forming means to the direction of the base plate. This is achieved by means of providing a positive rotation of the rotary shaft of the rotational means (such as the surbo-motor), and of moving (such as forcing back) to the direction of the rotational means, thereby reversely rotating the rotary shaft of the rotational means.

Accordingly, Applicant asserts that Piper does not disclose or suggest at least "wherein the substrate is pressed upon moving the scribe line forming means to the direction of the substrate and providing a positive rotation of the rotary shaft of the rotational means, and moving by forcing back to the direction of the rotational means, thereby reversely rotating the rotary shaft of the rotational means," as recited by independent claim 1.

Claims 2-5 depend from independent claim 1, so Applicant asserts that dependent claims 2-5 are differentiated from Piper for the same reasons as set forth above, in addition to their own respective features.

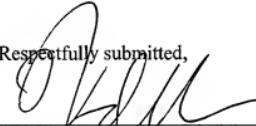
The Examiner next rejects claims 1 and 7 under 35 USC 102(e) as being anticipated by Takamatsu, et al., US Publication 2004/0155085 ("Takamatsu"). Applicant respectfully disagrees with these rejections, but Applicant amends the claims in order to clarify the patentable aspects of the claims and to expedite prosecution.

The apparatus shown in figure 15 of Takamatsu is directed to the glass cutter wheel production apparatus 10 as mentioned in, for example, paragraphs [0128] - [0133]. Applicant asserts that the glass cutter wheel production apparatus of Takamatsu is significantly different from the arrangement of the claimed invention. Moreover, Applicant asserts that Takamatsu does not disclose or suggest at least "wherein the substrate is pressed upon moving the scribe line forming means to the direction of the substrate and providing a positive rotation of the rotary shaft of the rotational means, and moving by forcing back to the direction of the rotational means, thereby reversely rotating the rotary shaft of the rotational means," as recited by independent claim 1.

Claim 7 depends from independent claim 1, so Applicant asserts that dependent claim 7 is differentiated from Piper for the same reasons as set forth above, in addition to its own respective features.

In view of the above remarks and species election, Applicant respectfully submits that all pending claims properly set forth that which Applicant regards as his/her invention and are allowable over the cited reference. Accordingly, Applicant respectfully requests allowance of the pending claims. Should the Examiner have any suggestions to place the application in even better condition for allowance, Applicant requests that the Examiner contact the undersigned representative at the telephone number listed below. The Commissioner is authorized to charge any fees due or refund any overpayment to Deposit Account No. 19-2814, including extension of time fees, if needed.

Respectfully submitted,


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